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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,075	02/02/2001	Juha Nurmi	14291	9448

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EXAMINER

HENDRICKS, KEITH D

ART UNIT

PAPER NUMBER

1761

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,075

Applicant(s)

NURMI ET AL.

Examiner

Keith Hendricks

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claims 1-29 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 29, the phrase "controlling effective parameters" is indefinite. With respect to the claimed invention, each of the terms in this phrase is indefinite in its own right. Applicants have added the term "effective", in an attempt to clarify the phrase. However, as previously stated on the record, it is unclear as to what method steps or "parameters" are modified or adjusted by the term "controlling". It is unclear as to how these parameters are controlled. Further still, it would be unclear to one skilled in the art as to which parameters applicant intends to be "effective", versus other (non-effective) parameters present. This point appears to be a critical element of the claimed invention, yet applicant has not provided sufficiently details to the claims such that one skilled in the art may clearly understand, and thus carry out, the invention.

Again, the term "substantial" is a relative term which renders the claim indefinite. Applicant's arguments filed September 29, 2003, have been fully considered but they are not persuasive. As previously stated on the record, the term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Further, it is unclear as to how one skilled in the art is to determine if some other proportion of residual moisture is left upon the coated core, versus a "substantial" amount. Applicant refers to pages 3-4 of the specification for support of this term. This is not deemed persuasive. Page 3 of the specification provides a definition as follows: "the term 'substantial residual moisture' as used throughout this specification and claims is intended to mean a moisture which is *substantially higher* than the moisture left in the coating layer in *conventional* panning procedures"

Art Unit: 1761

(emphasis added). This definition upon which applicant relies, itself utilizes relative terms which have yet to be defined. The passage continues by stating that "in conventional panning it is considered necessary to dry the sprayed coating layer to a fully dry condition before the next layer is sprayed"; however, it further states that "a normal coating is performed slowly and does not stop until the drying is substantially complete", thus again utilizing the term "substantially" to define the claimed term "substantial". Thus, no standard moisture amount is actually provided, such that one skilled in the art may ascertain the requisite degree of moisture claimed. Page 4 of the specification states that "the limit of moisture retained in the layer and the trigger point at which the next spraying should start may be worked out and optimized by tests which are well within the competence of those skilled in the art." This does not provide any specific parameters necessary to carry out the invention, and simply leaves the tasks to the skilled artisan to "work out and optimize". Yet this appears to be an essential element of the claimed invention, and thus applicant must particularly point out and distinctly claim the subject matter which the applicant regards as the invention, as required by the statute. Further at page 4, it is stated that "the relative humidity should be at least 1% higher than conventional"; however, no standard "conventional" amount is ever provided. This cannot be ascertained from the teachings of the specification, nor assumed to be absolutely no (0%) moisture on the surface of the layer.

(It is noted that the definiteness of claims 7, 25 and 26 may hinge upon this issue as well, due to the term "basic level". It is currently unclear whether this term is an attempted equivalent of a "conventional level".)

Again in claim 22, the term "several times" remains, and is a relative term which renders the claim indefinite. The term "several" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1761

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartel ("Crystallization and Drying During Hard Panning", of record). The reference and rejection are incorporated as cited in a previous Office action.

Applicant's arguments filed September 29, 2003 have been fully considered but they are not persuasive. At page 10 of the response, applicants state that "Hartel teaches the complete removal of moisture from the film", and that "this is opposite to the claimed invention in which drying is controlled such that a substantial residual moisture content remains in the drying coating layer at the start of the next spraying process." This is not deemed persuasive for the reasons of record. Again, the reference provides both general and specific information regarding the factors of crystallization and drying in a hard panning process. At page 54, col. 1, the reference states that "if drying occurs too rapidly, the surface layer of the film can dry too quickly, causing formation of a skin of rubbery fluid that inhibits moisture transfer. Once this skin forms, it is more difficult to remove the water trapped in the layers below." This is evidence of the property of "a substantial residual moisture in the drying coating layer at the start of a subsequent spraying phase", as recited in instant claim 1. It does not indicate, either explicitly or implicitly, that the moisture is completely removed and the layer completely dried prior to the subsequent spraying.

The reference does, however, acknowledge that certain method protocol, namely rapid drying, can result in "formation of a skin of rubbery fluid that inhibits moisture transfer." This is evidence that this protocol leaves "a substantial residual moisture... in the drying coating layer" (instant claims 1, 29), and thus anticipates the claimed invention. Applicant's claims do not differentiate between processes which may or may not form such a skin, trapping water below the surface. Applicant's statement that "surprisingly, the presence of a substantial amount of residual moisture does not cause the expected problems in the final product" is not deemed persuasive. There appears to be only two possible interpretations of applicant's stated result: either (a) applicant's claimed method utilizes the same steps disclosed by the reference, and is thus anticipated by the reference, or (b) applicant has performed method steps which are not disclosed by the reference, but which also are not currently claimed. However, there does not appear to be a reasonable explanation on the record as to how applicant may perform the claimed method, which is taught by the reference as being known in the art, and yet still arrive at a different result.

Art Unit: 1761

This may be due, at least in part, to the claimed use of the phrase "controlling effective parameters", which again, appear to be essential to applicant's claimed invention. Although the claims are interpreted in light of the specification, limitations from the specification or applicant's response are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

i) Claims 1-8, 15-17, 19-26 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degady et al. (US PAT 6,365,203), in view of Hartel. The references and rejection are incorporated as cited in a previous Office action.

Applicant's arguments filed September 29, 2003 have been fully considered but they are not persuasive. At pages 11 of the response, applicants state that Degady et al. and Hartel do not "teach or suggest a process in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air so as to cause a substantial residual moisture to remain in the drying coating layer at the start of a subsequent spraying phase." However, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

At page 13 of the response, applicant's state that "the 103 rejections also fail because the prior art references provide no motivation to modify the disclosed processes to include a drying step in which the drying of the cores between sprayings is carried out by controlling effective parameters of the drying air", etc. This is not deemed persuasive for the reasons of record and those stated above. Primarily, applicant has not sufficiently rebutted the teachings of the reference(s). According to Degady et al., heated air is introduced into the drum members in order to dry the core pieces, where "the coating material is dried on the individual pieces or cores of gum material at the same time as the solution is applied to the pieces of material. This insures an even consistent coating and allows the build up of numerous thin layers or

Art Unit: 1761

amounts of coating material on each core" (col. 4). Further, at column 2, lines 11-13, Degady et al. state that "the formulas for the coating solution can also be adjusted at different stages of the coating process in order to provide a more consistent and uniform coating." Columns 4-6 of Degady et al. provide specific parameters and variables, such as temperature, humidity and number of rotating drums, "in order to prevent the pieces of material from sticking together until they secure one or more layers of coating solution on them" (col. 6, ln. 30-32). "In this regard, as opposed to the prior art processes which add the coatings (spray), tumble the cores and then dry them in essentially three distinct steps, the present invention accomplishes all three of these steps at substantially the same time" (col. 6, ln. 42-46). Applicant's independent claims provide none of these specific teachings, but rather simply state that the drying is carried out by "controlling effective parameters". It was well known in the art, as stated by Hartel, that moisture migration (i.e. drying) continues to take place even after subsequent coating layers have been applied, and thus the instant claims do not provide a distinct patentable contribution to the art.

Furthermore, applicant's arguments fail to rebut the combined teachings of the references, because their arguments amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Simply stating that the references do not teach "controlling effective parameters of the drying air" is not sufficient, and in fact, flies in the face of the specific teachings of the reference, in light of the broad language instantly claimed.

ii) Claims 9-14, 17-18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degady et al. in view of Hartel, taken as cited above, in view of Reed et al. (US 5,376,389, of record). The references and rejection are incorporated as cited in a previous Office action.

Applicant's arguments filed September 29, 2003 have been fully considered but they are not persuasive. As applicant has chosen to argue the 35 U.S.C. 103(a) rejections *en mass*, applicant's arguments do not differ from those presented in response to the 103(a) rejection as stated above, and thus the rejection is maintained for the reasons of record and those state above.

Conclusion


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Hendricks whose telephone number is (571) 272-1401. The examiner can normally be reached on M-F (8:30am-6pm); First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0987.



KEITH HENDRICKS
PRIMARY EXAMINER